

# **AUTOMOTIVE TAILGATE WITH LIFT ASSIST SYSTEM-I**

## **Abstract**

An automotive tailgate includes a door adapted to pivot about a generally horizontal pivot axis, with the door including a shell defining an interior space. The door is pivoted upon bearings mounted upon bearing retainers located at each end of the door. A full floating torsion bar is provided and includes a first end rotationally grounded within the interior of the door shell and a second end engaged with and rotationally locked with one of the bearing inserts so that the torsion bar will be subjected to torsional loading as the door is pivoted. Because the torsion bar is full floating, the operation of the tailgate hinges will not be impaired even if the torsion bar were to become fractured.